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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,293	03/25/2005	Manfred Hubinger	HUBINGER, M. ET AL I PCT	4663
25889	7590	11/07/2007	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			KERNS, KEVIN P	
			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			11/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,293	Applicant(s) HUBINGER ET AL.	
	Examiner Kevin P. Kerns	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 16 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 16 and 18-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 and 01 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 15, 16, and 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-90481 in view of GB 2 118 524, and further in view of EP 0 352 576 (complete translation of EPO document (German text) provided with the previous Office Action).

JP 8-90481 discloses an external contact detecting device, including a switch-off (shut-off) box (Figure 4b) for a welding torch 4 (Figure 1) mounted on a robot system (Figure 2), in which the switch-off box (see abstract and the international search report,

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which cites JP 8-90481 as the closest prior art) comprises coupling means (3,5,7,9,10) mounted on a bearing plate 6 in a housing 2 of a body of the welding torch 4, such that coupling means (3,5,7,9,10) are connected to the torch body connected to a hose pack 23 (Figure 3) and allow transmission of electric energy; two oppositely arranged openings (channels) in the housing, such that the housing is comprised of a projection on one side and at least two parts (including an insulating external ring in the intermediate portion of the housing) attached by coupling means in the form of bolts and including a top bearing surface (supporting surface) of the tool side housing 3 (Figure 4a) to couple the housing parts to each other and the torch body and the hose pack, with the supporting surface of tool side housing 3 providing both punctual contact with the housing and connection to the contacting/switching elements, in the form of switch 11 of Figures 1, 3, and 4 (abstract; paragraphs [0002]-[0010] of Japanese text; and Figures 1-4). JP 8-90481 does not specifically disclose that the supporting surface, when lifted from the housing, is operable to activate and/or deactivate the contacting/switching element, and thus transmit a signal from the contacting/switching element to an interfaced control device or the robot system, as well as the coupling means having channels for transfer of supplied media (e.g. coolant air or water).

However, GB 2 118 524 discloses an industrial robot that includes a welding torch, in which the welding torch 24 is supported to be free from positional deviations during operations of the robot R while being capable of being tilted and slidably moved with respect to a movable unit of the robot R, such that a supporting surface of the coupling means is operable to be lifted from a portion of the housing (cap member 15)

via spring presser 14, sleeve 18, compression spring 20, and flexible guide 21, to provide detection of welding position by a single detector 25 in the spring presser 14, and thus activate and/or deactivate the contacting/switching element, resulting in transmission of a signal (and a potential abnormal state) from the contacting/switching element to an interfaced control device on the robot system, in which these features are advantageous for providing the welding torch with the capability of being freely displaced in acting directions of external forces without a possibility of damages to various parts and components (abstract; page 1, lines 5-11 and 109-130; page 2, lines 1-42 and 80-130; page 3, lines 1-130; page 4, lines 1-47; and Figures 3-10).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the external contact detecting device, including a switch-off (shut-off) box for a welding torch mounted on a robot system, as disclosed by JP 8-90481, by using the industrial robot that includes a welding torch that includes the supporting surface operable to activate and/or deactivate the contacting/switching element, and thus transmit a signal from the contacting/switching element to an interfaced control device or the robot system, as taught by GB 2 118 524, in order to provide the welding torch with the capability of being freely displaced in acting directions of external forces without a possibility of damages to various parts and components (GB 2 118 524; abstract; page 1, lines 109-126; and page 2, lines 30-42).

Neither JP 8-90481 nor GB 2 118 524 specifically discloses the coupling means having channels for transfer of supplied media (e.g. coolant air or water).

However, EP 0 352 576 (complete translation provided with the previous Office Action) discloses a welding torch that is controlled by an industrial robot with cutoff safety (switch-off box), in which the welding torch includes a coupling means (plug-in coupling 31) having channels that supply inert gas and a cooling agent via hose 19 and hose nozzle 20 (page 3, lines 1-11; and page 5, last two full paragraphs of translation), such that the coupling means having channels for transfer of cooling media is advantageous for providing cooling to the welding torch while providing greater line elasticity in the event of yielding movement of the torch, thus obtaining increased durability and operational reliability (abstract; pages 2-6 of translation; and Figures 1-4).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the external contact detecting device, including a switch-off (shut-off) box for a welding torch mounted on a robot system, as disclosed by JP 8-90481, by using the industrial robot that includes a welding torch that includes the supporting surface operable to activate and/or deactivate the contacting/switching element, and thus transmit a signal from the contacting/switching element to an interfaced control device or the robot system, as taught by GB 2 118 524, in order to provide the welding torch with the capability of being freely displaced in acting directions of external forces without a possibility of damages to various parts and components, and by further using the coupling means having channels for transfer of supplied media (e.g. coolant air or water), as disclosed by EP 0 352 576, in order to provide cooling to the welding torch while providing greater line elasticity in the event of yielding movement of the torch, thus obtaining increased durability and operational

reliability (EP 0 352 576; page 3, lines 1-11; and page 5, last full paragraph of translation).

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Further, the examiner notes that intended use limitations, such as "for transferring supplied media from one side of the coupling means to another" (apparatus claim 25), do not have patentable weight in an apparatus claim, since these limitations do not distinctly provide further structural limitations to this apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating to the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim." See MPEP 2114 and 2115.

Response to Arguments

4. The examiner acknowledges the applicants' amendment received by the USPTO on July 30, 2007. The amendments overcome prior 35 USC 112, 2nd paragraph rejections. The applicants have cancelled claim 17. Claims 15, 16, and 18-25 are currently under consideration in the application.

5. Applicants' arguments filed July 30, 2007 have been fully considered but they are not persuasive.

With regard to the applicants' remarks/arguments on pages 7-9 of the amendment, it is first noted that the applicants have incorporated the limitation of (cancelled) claim 17 into independent claim 25. However, this feature is disclosed in the primary reference (JP 8-90481), as JP 8-90481 (see above section 3) includes an insulating external ring in the intermediate portion of the housing (in addressing the applicants' arguments in the paragraph bridging pages 8 and 9 of the remarks section). Throughout page 7 of the remarks section, the applicants address the features (and the alleged lack of features, in particular the "coupling means having channels") of the three references in the 35 USC 103(a) rejections. The examiner respectfully disagrees, as the "coupling means having channels" are disclosed in EP 0 352 576, such that the coupling means (plug-in coupling 31) have channels that supply inert gas and a cooling agent via hose 19 and hose nozzle 20 (page 3, lines 1-11; and page 5, last two full paragraphs of translation), such that the coupling means having channels for transfer of cooling media is advantageous for providing cooling to the welding torch while providing greater line elasticity in the event of yielding movement of the torch, thus obtaining increased durability and operational reliability (EP 0 352 576; page 3, lines 1-11; and page 5, last full paragraph of translation). In addition to all features of independent claim 25 (and claims dependent therefrom) being disclosed and/or suggested by the combination of references under 35 USC 103(a), it is noted that the remainder of the arguments on pages 7-9 generally attack the references individually, rather than what

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one of ordinary skill in the art would have recognized upon review of the combined disclosures of the three references. In response to applicants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, it is noted that the applicants did not address or amend the claims to overcome the "intended use" limitations set forth in above section 3. As a result, claims 15, 16, and 18-25 remain rejected.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan Johnson can be reached on (571) 272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns *Kevin Kerns 11/6/07*
Primary Examiner
Art Unit 1793

KPK

kpk

November 6, 2007